

14581/US Hz

ABSTRACT

To measure or exert optically-induced forces on at least one particle in the focus of an optical cage, the following steps are taken:

- a) the focus is positioned in a microelectrode arrangement with a three-dimensional electrical field that has a field gradient which forms an electrical capture area, and the focus is at a distance from the capture area, and
- b) the amplitude of the electrical field, the light power of the light beam forming the optical cage, and/or the distance of the capture area from the focus are varied to detect which varied field property moves the particle from the focus to the capture area or vice versa, or at least to temporarily move the particle into the capture area.